June 2001

IF Directorate awards contract to WetStone Tech Inc.

by Fran Crumb, Information Directorate

ROME, *N.Y.* — The Air Force Research Laboratory (AFRL) Information Directorate has awarded a \$718,021 contract to WetStone Technologies Inc. of Freeville for research to develop a method of guaranteeing an assured, accurate time source for computer and networking operations.

The 13-month agreement, "Trusted Network Time for Defensive Information Warfare," is funded under the federal government's Small Business Innovative Research (SBIR) program.

"In many situations, absolute and trusted time is a crucial aspect of information operations," said Michael P. Nassif, program manager in the directorate's Defensive Information Warfare Branch. "As information becomes more time dependent, whether that need is for the coordination of information warfare systems, the protection of the national infrastructure or the integrity of e-commerce operations, the problem remains the same."

"Many applications require not only accurate time but also reliable time stamps to be used as legal evidence that digital data existed at a given time," said Nassif. "In other words, an electronic document must be stamped by a trusted time source. WetStone research will advance the state-of-the-art by developing an infrastructure for third party supplied 'trusted network time' for defensive information warfare and information assurance applications."

AFRL researchers are interested in examining, quantifying and assessing the specific vulnerabilities caused by the use of untrusted time. They will then seek to define an architecture for a trusted-third-party source to supply secure, non-repudiated time stamps that will integrate with existing and future defensive information warfare applications.

Trusted time technology is expected to have both military and civilian applications in such diverse areas as automated data recording systems, computer-controlled systems, computer networks, air traffic control, radio astronomy, broadcasts, geodesy, and radio and television networks – all of which depend on precise, accurate time. @